

IN THE UNITED STATES DISTRICT COURT
FOR THE MIDDLE DISTRICT OF TENNESSEE
NASHVILLE DIVISION

DONALD MIDDLEBROOKS,)	
)	
Plaintiff,)	
)	
V.)	No.
)	
)	
TONY PARKER, in his official capacity)	
As Tennessee's Commissioner of)	
Correction,)	
)	
TONY MAYS, in his official capacity)	
As Warden of Riverbend Maximum)	
Security Institution,)	
)	
Defendants.)	

COMPLAINT

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I. INTRODUCTION

Plaintiff Donald Middlebrooks seeks relief pursuant to 42 U.S.C. § 1983 for injunctive and declaratory relief, attorney fees, and cost of suit against the Defendants. Defendants intend to execute Mr. Middlebrooks by use of a lethal injection protocol that violates the Eighth Amendment. On its face, the State's current three-drug protocol is sure or very likely to cause serious illness and needless suffering. Mr. Middlebrooks is at increased risk of unconstitutional, unnecessary, and severe pain and lingering death because of his specific physical and mental conditions. Mr. Middlebrooks suffers from seizure disorder which is not well-controlled by medication. He regularly experiences grand mal seizures. He also suffers from co-morbid mental illness including major neurocognitive disorder, post-traumatic stress disorder, and schizophrenia. Mr. Middlebrooks experiences hallucinations and psychotic breaks. Stress exacerbates his symptoms and also triggers seizures. Sleep deprivation does as well. Due to his medical (seizures) and mental (psychosis) state it is extremely unlikely that the execution team will be able to set an IV for purposes of delivering the lethal injection chemicals. Even if the IV is set, it is sure or very likely that the IV will dislodge causing the chemicals to enter tissue instead of vein resulting in prolonged, excruciating agony, and suffering.

Mr. Middlebrooks has identified a feasible and readily implemented alternative method of execution which has been adopted by two other states—lethal gas.

Should the court reject this alternative, Mr. Middlebrooks suggests that administration of pentobarbital, though not without risk, would substantially reduce the pain and suffering associated with the current three-drug protocol because it would not include the administration of a vecuronium bromide or potassium chloride.

A single-drug administration of pentobarbital was part of the State's lethal injection protocol from 2013 until July 2018. Defendants have claimed they would use pentobarbital if it were available. Defendants previously represented that pentobarbital was not available, but if that was ever true, it is no longer the case. Several states and the federal government have found a domestic source of the active pharmaceutical ingredient (API) and compounding pharmacies that are willing and able to compound pentobarbital. In addition, the Office of Legal Counsel recently issued an opinion that the Food and Drug Administration has no jurisdiction to regulate lethal injection chemicals, such that the Defendants are now free to import pentobarbital.

In *Bucklew v. Precythe*, 139 S. Ct. 1112 (2019), the Supreme Court clarified that “[d]istinguishing between constitutionally permissible and impermissible degrees of pain . . . is a *necessarily* comparative exercise. To decide whether the State has cruelly ‘superadded’ pain to the punishment of death isn’t something that can be accomplished by examining the State’s proposed method in a vacuum, but only by ‘compar[ing]’ that method with a viable alternative.” *Id.* at 1126 (citing

Glossip v. Gross, 135 S. Ct. 2726, 2737-38 (2015); *Baze v. Rees*, 553 U.S. 35, 61 (2008)) (alterations in original). This clarification unified that which had previously be considered as two separate prongs of analysis under *Glossip*. Under *Bucklew*, any method of execution involving a substantial risk of serious harm is constitutionally impermissible if there is a viable alternative that involves less risk of pain and suffering.

II. JURISDICTION AND VENUE

1. This action arises under 42 U.S.C. §1983 for violations of the Eighth and Fourteenth Amendments to the United States Constitution. This Court has subject matter jurisdiction pursuant to 28 U.S.C. § 1331 (federal question); §1343 (civil rights violations and equitable relief under an act of Congress); §2201 (declaratory relief); and §2202 (preliminary and permanent injunctive relief).

2. This court has personal jurisdiction over Defendants, as they are residents of the State of Tennessee, are presently located in the State of Tennessee, and are elected or appointed officials of the State of Tennessee or otherwise acting on behalf of the State of Tennessee.

3. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391. Plaintiff is incarcerated at Riverbend Maximum Security Institution (RMSI), in Davidson County, and the Defendants intend to execute him in Davidson County. Accordingly, the events giving rise to this complaint have occurred and will occur in this county.

4. Plaintiff is not required to exhaust administrative remedies, because any administrative process is futile. Further, Plaintiff attempted to exhaust administrative remedies. Upon notice that Tennessee had adopted a lethal injection protocol including midazolam as the putative analgesic, Plaintiff filed a grievance objecting to the use of the midazolam-based protocol (then called “Protocol B”). Defendants took no action on Plaintiff’s grievance. Defendants’ inaction regarding Plaintiff’s grievance while at the same time seeking his execution demonstrates the futility of such a process.

III. STATEMENT OF INCORPORATION

5. All allegations in this Complaint are incorporated in all sections as if fully set forth therein.

IV. PARTIES

6. Plaintiff Donald Middlebrooks is a United States citizen and a resident of the State of Tennessee.

7. Middlebrooks is sentenced to death in the state of Tennessee and housed at RMSI in Nashville, Davidson County, Tennessee. Mr. Middlebrooks is in the custody of the Tennessee Department of Correction (TDOC).

8. The Attorney General and Reporter for the State of Tennessee has filed a motion requesting that the Tennessee Supreme Court set an execution date for Mr. Middlebrooks.

9. Defendant Tony Parker is the Commissioner of the Tennessee Department of Correction, a state agency located in Nashville, Tennessee. As head of the TDOC, Commissioner Parker adopted and will implement the Lethal Injection Protocol at issue in this litigation. In his capacity as Commissioner, Mr. Parker will oversee Mr. Middlebrooks's execution at RMSI. Plaintiff sues Commissioner Parker in his official capacity. The commissioner is a state actor, acting under color of state law in executing Plaintiff; his efforts to do so violate Mr. Middlebrooks' constitutional rights as described below.

10. Defendant Tony Mays is the Warden of RMSI where Mr. Middlebrooks is in custody and where the state of Tennessee intends to execute him. Plaintiff sues Mr. Mays in his official capacity as he is a state actor, acting under color of state law in executing Mr. Middlebrooks. Defendant Mays is directly in charge of carrying out the lethal injection protocol that violates Mr. Middlebrooks's rights as described below.

V. FACTS

A. Procedural History and Statutory Framework

11. On July 23, 1990, a Davidson County jury sentenced Plaintiff to "death by electrocution."

12. In 1998, the Tennessee legislature changed the method of execution to lethal injection for all crimes committed after January 1, 1999:

For any person who commits an offense for which the person is sentenced to the punishment of death, the method for carrying out this sentence shall be by lethal injection.

Tenn. Code Ann. § 40-23-114(a); *see also* 1998 Tenn. Laws Pub. Ch. 982.

13. Individuals, such as Mr. Middlebrooks, who committed an offense before January 1, 1999, and “were sentenced to the punishment of death may elect to be executed by electrocution by signing a written waiver waiving the right to be executed by lethal injection.” Tenn. Code Ann. § 40-23-114(b).

14. Mr. Middlebrooks has not— and will not— elect a method of execution. Accordingly, under Tennessee Code Annotated § 40-23-114(a) and (b), the death sentence will be carried out by lethal injection.

15. If a court finds the State’s execution protocol unconstitutional, state statute allows for execution “by any valid method”:

[A]ll persons sentenced to death for a capital crime shall be executed by any constitutional method of execution. No sentence of death shall be reduced as a result of a determination that a method of execution is declared unconstitutional under the state constitution or the Constitution of the United States. In any case in which an execution method is declared unconstitutional, the death sentence shall remain in force until the sentence can be lawfully executed by any valid method of execution.

Tenn. Code Ann. § 40-23-114(d).

16. State statute provides that the State will execute inmates by electrocution if a court finds the lethal injection protocol unconstitutional or the commissioner of correction certifies to the governor that “one (1) or more of the

ingredients essential to carrying out a sentence of death by lethal injection is unavailable through no fault of the department.” Tenn. Code Ann. 40-23-114(e).

17. In September 2013, TDOC revised its lethal injection protocol to a one-drug, pentobarbital protocol:

Pentobarbital: An intermediate-acting barbiturate. A lethal dose of 100 ml of a 50 mg/ml solution (a total of 5 grams) is administered during the execution process.

18. TDOC next revised its lethal injection protocol in January 2018, at which time it retained the pentobarbital protocol (labeled “Protocol A”) and added the current three-drug protocol (500 milligrams of midazolam, 100 milligrams of vecuronium bromide, and 240 mEq potassium chloride) (labeled “Protocol B”).

19. On July 5, 2018, TDOC again amended its lethal injection protocol, removing “Protocol A,” and leaving only the three-drug protocol. Hereafter, all references to “the Lethal Injection Protocol” are to the July 5, 2018 protocol currently in effect.

B. Mr. Middlebrooks Physical and Mental Characteristics

20. Mr. Middlebrooks has a long-standing and well-documented seizure disorder.

21. Mr. Middlebrooks seizure disorder is only partially controlled by medication.

22. Despite medication, Mr. Middlebrooks regularly experiences petit mal and grand mal seizures.

23. Grand mal seizures cause violent muscle contractions.
24. It is sure or very likely prison officials will be unable to set an IV during a seizure.
25. It is sure or very likely that an IV, once set, will dislodge during a seizure resulting in the lethal chemicals entering the tissue or muscle rather than the veins.
26. Stress triggers seizure activity.
27. Sleep-deprivation triggers seizure activity.
28. The protocol requires the inmate to be placed on “death watch” 72 hours prior to a scheduled execution.
29. During death watch the inmate is under constant visual observation.
30. During death watch the lights in the cell remain on at all times.
31. During death watch the inmate’s movements are constantly recorded.
32. During death watch the inmate’s toileting is observed.
33. During death watch the inmate is required to submit to strip searches before and after every visit with his legal team, clergy, or family.
34. Conditions on death watch are sure or likely to trigger a seizure in Mr. Middlebrooks.
35. Mr. Middlebrooks suffers from Major Neurocognitive Disorder, Schizophrenia, and Post-traumatic Stress Disorder.
36. Mr. Middlebrooks experiences hallucinations and psychosis.

37. The experience of death watch is sure or very likely to result in Mr. Middlebrooks becoming psychotic.

38. It is sure or very likely that Mr. Middlebrooks will suffer multiple seizures while on death watch.

39. It is sure or very likely that Mr. Middlebrooks will seize at the time that the execution team attempts to set an IV in his veins.

40. It is sure or very likely that the IV team will not be able to set an IV due to an ongoing seizure.

41. Even if the execution team is able to set an IV, it is sure or very likely that the IV will become dislodged.

42. It is sure or very likely that the dislodged IV will cause blood to spurt from Mr. Middlebrooks' veins.

43. It is sure or very likely that the lethal chemicals will enter Mr. Middlebrooks tissue or muscle, rather than his veins.

44. It is sure or very likely that Mr. Middlebrooks will suffer unnecessary pain, panic, suffocation, burning sensations, and mental anguish as a result of a dislodged IV.

C. Tennessee's Lethal Injection Protocol

1. Midazolam

45. Midazolam is a benzodiazepine.

46. Midazolam is a sedative.

47. Sedation is a state of calm or sleep.
48. Midazolam is used for induction of anesthesia.
49. Induction is a stage that precedes achieving and maintaining a plane of general anesthesia.
50. During the induction stage, an induction agent induces a state of sedation in which the patient is calm but arousable when subjected to noxious stimuli. The eyes generally closed in the induction stage.
51. At the induction stage, a person remains sensate to pain.
52. The depth of midazolam's inhibitory effect on the central nervous system is limited; midazolam cannot induce or maintain a state where a person is fully unaware of or insensate to pain.
53. Midazolam affects the central nervous system by facilitating the activity of gamma amino-butyric acid (GABA) receptors, the primary effect of which is to reduce anxiety.
54. GABA is a primary neurotransmitter that inhibits central nervous system activity.
55. When inhibitory neurons of the brain release GABA onto other brain neurons, GABA binds to GABA-specific receptors. This binding causes chloride ion channels to open on the recipient neuron.
56. The influx of chloride ions through the channels causes those neurons to become more quiescent, to decrease electrical activity, and to decrease the

likelihood of neuronal firing, resulting in neuronal inhibition and central nervous system depression.

57. Midazolam promotes the binding of GABA to GABA-A receptors, which are ion channels with multiple binding sites that can be opened by GABA.

58. Midazolam's mechanism of action is inherently limited by the finite number of GABA-A receptors in the brain.

59. Once each of the GABA-A receptors has been bound with the midazolam, activating the inhibitory response of the neural pathway, administration of additional quantities of midazolam does not provide any greater sedative effect. This phenomenon is known as the "ceiling effect."

60. Because of the ceiling effect, 500 mg of midazolam is no more effective than the minimum dose of midazolam required to bind the available GABA receptors.

61. Regardless of dose, midazolam cannot produce a plane of general anesthesia.

62. Midazolam has a negligible analgesic effect.

63. There is no dose of midazolam that can sufficiently inhibit the severe pain and needless suffering caused by vecuronium bromide and potassium chloride.

64. Midazolam cannot reliably serve as general anesthesia, as barbiturates (including pentobarbital) can.

65. Barbiturates and benzodiazepines are different classes of drugs that work via different mechanisms.

66. Barbiturates do not have a “ceiling effect,” can quiet all brain activity, and can cause a coma or brain death in a way that midazolam cannot.

67. Condemned inmates have responded during lethal injections after being injected with 10, 50, 500, 700, and 1,000 mg of midazolam.

68. There exists a substantial and unjustifiable risk that the use of midazolam as required by the Lethal Injection Protocol will not prevent Plaintiff from experiencing the severe pain and needless suffering of involuntary paralysis and suffocation caused by vecuronium bromide.

69. There exists a substantial and unjustifiable risk that the use of midazolam as required by the Lethal Injection Protocol will not prevent the Plaintiff from experiencing the severe pain and needless suffering of potassium chloride as it passes through his veins and causes cardiac arrest.

70. The consciousness check contained in the Lethal Injection Protocol is insufficient to determine whether Plaintiff will experience the severe pain and needless suffering of the second and third drugs in the Protocol.

71. An eyelash brush is not a sufficient consciousness check, as it is not a noxious stimuli.

72. A trapezius pinch is not a sufficient consciousness check, as it is not comparable to the noxious stimuli created by the sensation of suffocation from vecuronium bromide or as the sensations caused by the potassium chloride.

73. Unresponsiveness to an eyelash brush or to the trapezius pinch fails to demonstrate that Plaintiff will not experience serious pain and needless suffering when more noxious stimuli are introduced into the body.

2. Vecuronium Bromide

74. Vecuronium bromide is a neuromuscular blocking agent that produces paralysis, including of the respiratory muscles.

75. A neuromuscular blocking agent blocks the receptor sites in muscle tissue that receive nerve impulses.

76. When these sites are blocked, the nerve impulses have no effect on the muscle tissue, which means that the muscle tissue will no longer contract, thus causing paralysis.

77. A neuromuscular blocking agent has no effect on the central nervous system, and consequently it has no effect on awareness or the sensation of pain and suffering.

78. Vecuronium bromide is a noxious stimuli.

79. Vecuronium bromide has no analgesic properties.

80. The vecuronium bromide is unnecessary to cause death and is not the cause of death from the Lethal Injection Protocol.

81. The vecuronium bromide will cause Plaintiff to be completely unable to move; he will not be able to respond by breathing, by moving, or by facial or vocal expressions.

82. When the diaphragm and other muscles that control breathing are paralyzed, Plaintiff will experience the sensation of suffocation without being able to respond.

83. The use of vecuronium bromide will prevent execution team members, correctional staff, and witnesses from observing Plaintiff's pain responses.

84. Vecuronium bromide serves no purpose in the protocol other than to act as a chemical veil that prevents witnesses from observing signs that an inmate is aware and able to feel the searing pain caused by the administration of potassium chloride.

85. Midazolam will not prevent the Plaintiff from experiencing the pain and suffering of suffocation caused by Defendants' use of vecuronium bromide.

86. When Plaintiff experiences the pain and suffering of suffocation, his body will respond with an immediate and extreme spike in adrenaline and other stress hormones.

87. Administration of vecuronium bromide to any sensate human produces the terrifying sensation of being buried alive.

88. A human being's biological response to the administration of vecuronium bromide is sure or very likely to overcome the sedative effect of midazolam.

89. Though vecuronium bromide would, without medical intervention, cause death through suffocation after sufficient time for oxygen deprivation to cause brain death, the Lethal Injection Protocol provides for the inmate to be killed by administration of potassium chloride before death by vecuronium bromide can occur.

90. As Plaintiff is sure or very likely to be conscious enough to experience the serious pain, unnecessary suffering, and terror caused by suffocation, the Lethal Injection Protocol is unconstitutional.

91. Because the injection of vecuronium bromide as set forth in the Lethal Injection Protocol takes two minutes to administer, removing the vecuronium bromide from the Lethal Injection Protocol would hasten death by two minutes.

92. Defendants have admitted that vecuronium is unnecessary to cause death.

3. Potassium Chloride

93. Potassium chloride, the third drug in the Lethal Injection Protocol, is a metal halide salt composed of potassium and chloride.

94. Given midazolam's lack of analgesic properties, Plaintiff is sure or very likely to experience serious pain and needless suffering from an intravenous

injection of potassium chloride, which will cause a searing, burning, sensation in his veins.

95. Death by potassium chloride does not occur instantaneously.

96. Potassium chloride causes death by interference with the electrical activity of the heart resulting in cardiac arrest.

97. Though the heart stops beating, consciousness may continue for as long as 3 minutes until brain death.

98. Given midazolam's lack of analgesic properties, Plaintiff is sure or very likely to be aware and experience serious pain and needless suffering caused by searing, burning sensation in his veins and the heart attack induced by potassium chloride.

99. The use of potassium chloride as part of a lethal injection protocol is unnecessary.

100. The serious pain, needless suffering, and terror caused by potassium chloride violates the Eighth Amendment.

D. Electrocution is Unconstitutional As Applied to Mr. Middlebrooks

101. Under Tennessee law, if lethal injection is declared unconstitutional, the method of execution defaults to electrocution.

102. Under Tennessee law, if electrocution is declared unconstitutional, then the state is authorized to use any other constitutional means to carry out an execution.

103. As stated above, Mr. Middlebrooks is sure or likely to suffer a seizure at the time of execution.

104. As stated above, Mr. Middlebrooks is sure or likely to be psychotic at the time of execution.

105. Because Mr. Middlebrooks will be seizing and psychotic at the time of execution, the execution team will not be able to secure him to the electric chair.

106. Because Mr. Middlebrooks will be seizing and psychotic at the time of execution, the execution team will not be able to properly place the sponges necessary for electrocution to take place.

1. Definitions

107. Electricity is the flow of electrons from one atom to another.

108. A circuit is the path electrons follow from the point where they leave an electrical generating unit until they return to it.

109. Voltage is the electrical pressure that forces electrons through a circuit. Voltage is measured in volts.

110. Current is the flow of electrons traveling through a circuit. Current is measured in amperes or amps.

111. Direct current is current that flows steadily through a circuit in one direction.

112. Alternating current is current that flows through a circuit in one direction for half a cycle, then reverses direction and flows in the opposite direction

for the remaining half of the cycle. Hertz, or HZ, is the term for cycles per second that occur in an alternating electrical current.

113. Resistance is the opposition an object presents to the passage of an electrical current through it. Resistance is measured in ohms.

114. Ohm's Law provides that resistance = voltage/current, measured as ohms = volts/amps.

2. Tennessee's Electric Chair and Chamber

115. Fred A. Leuchter designed and manufactured the equipment Tennessee uses to execute prisoners by means of electrocution.

116. On or around November 29, 1989, Leuchter installed the electrocution equipment he created at RMSI.

117. Leuchter does not have, and never had, an electrical engineering license from any state.

118. Leuchter's claimed expertise in scientific matters has been rejected by trained scientists in the fields in which he claims expertise. For example, Leuchter claimed that the absence of trace elements of lethal gas on bricks he stole from the WWII Auschwitz concentration camp constituted evidence that the Holocaust did not occur. The scientific community has universally rejected his theory.

119. On or around April 16, 1994, Michael S. Morse tested the electrocution equipment Leuchter created. Morse opined that the Leuchter's equipment did not deliver an adequate current to carry out an execution and did not have the capacity

to do so. Morse made fourteen specific recommendations for modifications to Leuchter's electrocution equipment.

120. On or around April 25, 1994, Jay Weichert tested the electrocution equipment Leuchter created. Weichert opined that Leuchter's equipment did not function properly. Weichert made seven specific recommendations for modifications to Leuchter's electrocution equipment.

121. Tennessee made some, but not all, of the modifications Morse and Weichert suggested.¹

122. Defendants maintain the electrocution equipment in an Execution Chamber and Executioner's Room located within the RMSI.

123. The Execution Chamber contains the Electric Chair.

124. The component parts of the Electric Chair include: (a) a head piece (a leather cranial cap lined with copper mesh inside - hereafter sometimes referred to as the head electrode); (b) two leg electrodes; (c) a junction box located behind a back leg of the Electric Chair; (d) a cable that runs from the junction box to the head electrode; (e) two cables that run from the junction box to the leg electrodes; and, (f)

¹After Morse and Weichert suggested modifications to Leuchter's electrocution equipment, they examined Florida's electric chair. Weichert concluded that Florida's electrocution equipment "looks excellent." In a subsequent Florida electrocution, however, the condemned prisoner survived after the executioner shut off the chair's power, taking ten deep breaths before dying. Before a medical doctor declared the prisoner dead, blood poured out from under the sheath covering the prisoner's face, and blood on the prisoner's chest spread to the size of a dinner plate, oozing through the buckle holes on the chest straps that harnessed him to the electric chair.

a removable drip pan underneath a perforated seat.

125. The Executioner's Room adjoins the Execution Chamber.

126. The Executioner's Room contains: (a) an electrical console (the unit the executioner manipulates to carry out an electrocution); (b) a transformer (the device that transfers electricity to and from the Electric Chair); (c) an amp meter (a device that measures the number of amps in an electrical current); and, (d) a switch for activating an exhaust fan above the Electric Chair.

127. In preparing to activate the Electric Chair, Defendants connect a low voltage cable from the electrical console to the transformer and a high voltage cable from the transformer to the Electric Chair's junction box.

128. When activated, the transformer and the Electric Chair create an open alternating current electrical circuit. Any object that creates a connection between the head electrode and the leg electrodes closes, and becomes part of, the electrical circuit. That current traveling that circuit will alternate, or reverse direction, sixty times per second (60 HZ).

3. Defendants' Inadequate Testing Procedures for Tennessee's Electric Chair

129. The Tennessee Protocol for Execution Procedures For Electrocution provides that Defendants' electrocution equipment is designed to deliver to a prisoner for twenty seconds an alternating current of 1,750 volts at 7 amps, followed by a pause of fifteen seconds, followed by a fifteen second alternating current of 1,750 volts at 7 amps.

130. Defendants use a Test Load Box when they test the electrocution equipment.

131. The purpose of the Test Load Box is to simulate a prisoner's body.

132. Defendants place the Test Load Box in the Electric Chair's perforated seat and connect it to the power cable for the head electrode and the leg electrodes.

133. After connecting the Test Load Box to the power cable for the head electrode and the leg electrodes, Defendants activate the Electric Chair and check to see if the transformer meter reads 1,750 volts and the amperage meter reads 7 amps.

134. Ohm's Law establishes that for the electrocution equipment to maintain a circuit that delivers a current of 1,750 volts at 7 amps, the circuit must provide 250 ohms of resistance. $(1,750 \text{ (volts)} / 7 \text{ (amps)} = 250 \text{ (ohms)})$.

135. Defendants' testing procedure establishes only that when the Test Load Box is used to complete the circuit containing the Electric Chair, the Test Load Box provides resistance that creates a total circuit resistance of 250 ohms.

136. Defendants' testing procedure fails to establish that the electrocution equipment will maintain during the electrocution of a prisoner a circuit that delivers a current of 1,750 volts at 7 amps to the prisoner because:

- a. For testing purposes, Defendants attach a tester lead from the Test Load Box directly to the power cable for the head electrode. During an execution, however, Defendants: (a) attach the power cable for the

head electrode to the head piece; (b) put a sponge saturated with salt water on the prisoner's head; and, (c) attach the head piece to the prisoner's sponge-covered head. The interface between the head electrode/sponge and scalp of the prisoner's head presents a region of high electrical resistance unaccounted for in Defendants' testing procedure.

- b. While the Test Load Box contains constant material and thereby reliably provides a constant resistance that creates a total circuit resistance of 250 ohms, the electrical resistance of human bodies varies widely. Factors affecting an individual's resistance to an electrical current include, but are not limited to: (a) the presence or absence of fatty tissue beneath his skin; (b) the distribution and activity of sweat glands; (c) the amount of oil in and on his skin; (d) the thickness of his skin; (e) the amount of hair on his body; (f) the thickness of his skull; (g) the location and size of any cranial skull fissures; and, (h) regional blood flow at the time of electrocution.
- c. As a consequence of these factors, a prisoner's body may create a circuit resistance significantly higher or lower than the 250 ohm circuit resistance the Test Load Box creates and thereby significantly alter the voltage and/or current that Defendants apply to him.

- d. Defendants make no effort to investigate the resistance individual prisoners present to electrical current.
- e. While conditions remain constant within the Test Load Box throughout the testing procedure, during an electrocution execution the resistance of the prisoner's body changes dramatically as his skin heats, perforates, vaporizes, burns, and chars and the saline solution in the sponges between the prisoner's body and the electrodes heats and vaporizes.

137. Defendants' testing procedure fails to ensure that the electrocution equipment will minimize the pain it inflicts on a prisoner because:

- a. Individual prisoners have different thresholds for the sensation of electrical current.
- b. Individual prisoners have different thresholds for the perception of pain.
- c. Individual prisoners experience different physiological effects to electrical current.
- d. Individual prisoners will experience significant differences in the amount of electrical current required, and the amount of time for application of that current, to cause unconsciousness.

4. Pre-execution Protocol

138. Three days prior to a scheduled electrocution, Defendants require the

prisoner to pack up his belongings. After the prisoner does so, Defendants shackle and handcuff him and transport him and his belongings to Building 8, the Capital Punishment Building.

139. Upon arriving at the Capital Punishment Building, a guard thoroughly strip searches the prisoner, issues him a new prison uniform, and locks him in a solitary cell adjacent to the Execution Chamber (Death Watch). A guard inventories the prisoner's belongings and packs them away.

140. From his Death Watch cell, the prisoner is aware of the electrocution preparations that prison employees perform in the Execution Chamber during the days leading up to the prisoner's electrocution, including tests activating the exhaust fan over the Electric Chair and the Electric Chair itself.

141. A guard is posted outside the prisoner's Death Watch cell twenty-four hours a day. Guards constantly monitor and record the prisoner's behavior, actions, movements, and communications.

142. All communication with other inmates is terminated.

143. All recreation opportunities are terminated.

144. All contact visits with the prisoner's family and friends are terminated.

145. A guard performs a "very thorough strip search" of the prisoner any time the prisoner leaves or enters his Death Watch cell. After strip searching the prisoner, the guard issues him a new prison uniform and handcuffs him.

146. A prisoner lives under Death Watch conditions for two to three days

prior to his electrocution.

147. Prior to taking the prisoner to the Electric Chair, Defendants shave the prisoner's head and legs.

148. Guards chosen to take the prisoner from his Death Watch cell to the Electric Chair (Extraction Team) approach the prisoner's cell and ask the prisoner to come to the cell door so they can handcuff him. After being handcuffed Extraction Team members require the prisoner to kneel on his bunk with his head facing the wall.

149. Extraction Team members escort the prisoner to the adjoining Execution Chamber.

150. Extraction Team members require the prisoner to sit on the Electric Chair's perforated seat.

151. Extraction Team members remove the handcuffs, body belt, and leg irons they attached to the prisoner when he was in his Death Watch cell.

152. Extraction Team members tightly strap the prisoner's arms onto the arms of the Electric Chair.

153. Extraction Team members tightly harness the prisoner into the Electric Chair with belts that cross the prisoner's chest.

154. Extraction Team members place two sponges saturated with salt water on each of the prisoner's ankles and secure the prisoner's ankles to the Electric Chair's leg electrodes.

155. It takes Extraction Team members approximately ten minutes to secure the prisoner into the Electric Chair.
156. Prison guards often bind a prisoner into the Electric Chair so tightly that the belts and straps inhibit the prisoner's breathing, cut off blood flow to the prisoner's arms and legs, and pinch the prisoner's nipples.
157. The blinds to the Witness Room are opened.
158. The Warden asks the prisoner to speak his last words.
159. Extraction Team members place a sponge saturated with salt water on top of the prisoner's head.
160. Extraction Team members put the head piece on the prisoner's head and tightly secure its two side straps and chin strap. Salt water from the sponge on top of the prisoner's head runs down the prisoner's face.
161. Extraction Team members snap a shroud onto the head piece.
162. Extraction Team members use water bottles to add salt water to the ankle sponges.
163. Extraction Team members leave the Execution Chamber.
164. The prisoner sits in silence and darkness, tightly bound to the Electric Chair, with water from the sponges running down his head and ankles.
165. The prisoner hears the exhaust fan go on.

5. Execution Through the Use of the Electric Chair

166. When the Electric Chair is activated, the transformer sends electrical

current through the head electrode/sponge and onto the prisoner's head. The current exits the prisoner's body at the leg electrodes and travels back to the transformer, completing a circuit. The current alternates between traveling this direction and the opposite direction sixty times per second.

6. Prisoner Remains Alive For a Period of Time

167. There is no scientific evidence suggesting that applying high voltage electrical current to a prisoner during an electrocution execution causes the prisoner's instantaneous death.

168. Historical events establish that individuals have remained alive: (a) when they contacted high voltage electrical currents; (b) during the time they remained in contact with those currents; and (c) after the currents stopped contacting their bodies.

169. Judicial electrocutions establish that prisoners have remained alive during and after the electrocution process.

170. A prisoner's heart will not necessarily stop instantaneously when the high voltage electrical current contacts the prisoner's body. The heart can remain active for a period of time after introduction of the electrical current because:

a. While skeletal muscles involuntarily contract when high voltage electrical current contacts a body and will remain contracted for the duration of the contact (known as muscle tetany), cardiac muscle does not tetanize with application of the strong, rapid stimuli associated with 60 HZ alternating current.

b. The electrical resistance of the lungs and the great vessels in the mediastinum shunt the electrical current away from the heart.

171. Even when contact with high voltage electrical current causes a prisoner's heart to stop beating, when the current ceases there is a high probability that the prisoner's heart will resume beating.

172. While there is a possibility that a prisoner's heart will enter a mode of excitation known as fibrillation during an electrocution execution, when the current ceases the prisoner's heart can resume a normal beating pattern.

173. Even when a prisoner's heart fibrillates for an extended period of time during an electrocution execution, death does not occur instantaneously. Rather, death results over a period of time as the fibrillation of the prisoner's heart reduces cardiac output to the point that it is insufficient to maintain life.

174. When high voltage electrical current contacts a prisoner, the skeletal muscles he requires for breathing tetanize. These muscles include the intercostal muscles between the ribs, the muscles of the diaphragm, and the muscles of the abdomen.

175. Tetanized muscle rapidly burns large quantities of metabolic energy. As a result, during an electrocution execution the prisoner experiences a rapid increase in demand for oxygenated blood and a corresponding rapid increase in the need to eliminate carbon dioxide.

176. Because the skeletal muscles the prisoner requires for breathing

tetranize during an electrocution, the prisoner cannot breathe to supply the needed oxygen and eliminate the carbon dioxide.

177. As a result, when Defendants electrocute a prisoner, the prisoner dies from asphyxiation and/or organ damage due to thermal heating, *i.e.*, cooking. These processes require a period of time to produce death.

7. The Prisoner Remains Conscious and Sensate

178. There is no scientific evidence suggesting that applying high voltage electrical current to a prisoner during an electrocution execution induces instantaneous unconsciousness or analgesia.

179. Historical events establish that individuals have remained conscious and sensate: (a) when they contacted high voltage electrical currents; (b) during the time that they remained in contact with those currents; and (c) after the currents stopped contacting their bodies.

180. A prisoner will lose consciousness during an electrocution through loss of brain function. Loss of brain function occurs through a direct assault on the brain, or insufficient blood circulation to the brain due to cardiac fibrillation or asphyxia.

181. There is no scientific evidence that applying high voltage electrical current to a prisoner during an electrocution execution provides a sufficient direct assault on the prisoner's brain to cause invariably an instantaneous loss of brain function.

- a. Upon contacting the prisoner's body at the top of his head, the electrical current follows to the leg electrodes on the paths of least resistance. The prisoner's skull presents the current a resistance significantly greater than the resistance the prisoner's skin presents. As a result, the vast majority of the electrical current travels around the perimeter of the prisoner's head and down the prisoner's torso and legs until it leaves his body through the leg electrodes. As the current alternates, it follows like paths of least resistance in the opposite direction.
- b. Because the skull effectively insulates the brain from the electrical current flowing from and to the head electrode/sponge, the electrical current does not immediately incapacitate the prisoner's brain. Rather, the ability of the prisoner's brain to function becomes compromised over time by: (a) the reduced portion of the current that reaches the prisoner's brain; (b) indirect thermal transfer through the skull; (c) indirect thermal transport through the blood vessels of the prisoner's neck; and (d) loss of oxygen.
- c. Although the reduced portion of electrical current that reaches the prisoner's brain may, on occasion, depolarize a prisoner's brain, there is no scientific evidence that the prisoner's depolarized brain neurons

will thereafter be incapable of repolarizing during the alternating current stimulation.

- d. Should depolarization occur, the Electric Chair's 60 HZ alternating current provides for repolarization of the prisoner's brain.

182. There is no scientific evidence that applying high voltage electrical current to a prisoner during an electrocution execution invariably causes fibrillation of the prisoner's heart.

- a. Even when the prisoner's heart fibrillates during an electrocution execution, when the current ceases, the prisoner's heart can resume a normal beating pattern.

- b. Even when the prisoner's heart fibrillates for an extended period of time during an electrocution execution, the prisoner will not lose consciousness for eleven to twenty seconds.

183. There is no scientific evidence that asphyxiation causes an instantaneous loss of consciousness. Rather, scientific evidence and historical events establish that loss of consciousness by asphyxiation requires one to three minutes.

184. There is no scientific evidence that applying high voltage electrical current to a prisoner during an electrocution execution invariably causes an instantaneous inability in the prisoner's brain to receive and process brain signals. Rather, scientific evidence and historical events establish that an individual who contacts a high voltage electrical current can experience excruciating pain. Thus, for

some period of time during an electrocution execution, the prisoner's brain can remain capable of processing pain sensations arising from peripheral nerves, direct stimulation of the brain, or both.

8. The Prisoner Will Experience Unnecessary and Severe Pain

185. A prisoner that remains alive, conscious, and sensate for some period of time during an electrocution execution will experience excruciating pain and suffering from the phenomena that occurs when a high voltage electrical current contacts a person.

186. When high voltage electrical current contacts the prisoner and travels through his body it will burn him, causing extreme pain.

187. When high voltage electrical current contacts the prisoner and travels through his body it will thermally heat, *i.e.*, cook, his body and internal organs, causing extreme pain.

188. When high voltage electrical current contacts the prisoner and travels through his body it will directly excite all sensory, motor, secretory, and autonomic nerves along the paths the current follows, causing extreme pain.

189. When high voltage electrical current contacts the prisoner and travels through his body it will excite brain neurons, causing extreme pain as well as sensations of sound, light, dread, and fear.

190. When high voltage electrical current contacts the prisoner and travels through his body, his skeletal flexor and extensor muscles will simultaneously

tetanize, causing extreme pain and possibly breaking bones in the prisoner's body. The muscles will remain tetanized until the current ceases.

191. When high voltage electrical current contacts the prisoner and travels through his body, the skeletal muscles he requires for breathing tetanize, and the prisoner can neither inhale nor exhale. As a result, the prisoner experiences the sensation of suffocating. The intense metabolic demands of muscle tetany aggravate the prisoner's sense that he is suffocating.

192. The initial twenty-second application of electrical current will not provide a time long enough for a prisoner to die from asphyxiation because electrical current applied during an electrocution execution will not necessarily stop the prisoner's heart and the skeletal muscles the prisoner requires for respiration will relax when the current stops and air will flow into the prisoner's lungs.

193. During the fifteen-second interval that follows, a prisoner's heart can circulate the newly oxygenated blood to the brain and the rest of the prisoner's body, keeping him alive, conscious, and sensate for the second application of electrical current.

194. Because Tennessee uses an alternating electrical current for electrocution executions, the prisoner's extreme pain and suffering will repeat sixty times per second as the current alternates the direction it follows.

195. The prisoner's perception of time during the electrocution process can become distorted so that he may perceive each of the sixty per second alternating

cycles of electrical current and electrical trauma lasting dramatically longer than it would appear to a bystander.

196. Because contact with high voltage electrical current causes muscle tetany, and because a prisoner is harnessed tightly into the Electric Chair, during an electrocution execution a prisoner is unable to signal that he is experiencing pain and suffering.

197. Because of the unpredictability and variability of each prisoner's electrical resistance during an electrocution execution, the current delivered to each prisoner will vary significantly from the currents delivered to other prisoners and the current the Electric Chair delivers when Defendants test it using the Test Load Box. As a result, the time a prisoner will remain alive, conscious, and sensate is unknown and will vary substantially from prisoner to prisoner.

198. Because prisoners can remain alive at the conclusion of an electrocution execution, the Defendants' protocol provides that a medical doctor wait five minutes after the executioner shuts off power to the Electric Chair before the doctor examines a prisoner's body for signs of life. During this five-minute period, prisoners who survive the electrocution process die from thermal heating, *i.e.*, cooking, of their vital organs, and asphyxiation.

9. Witness Accounts

199. Witnesses to electrocution executions report that when the executioner activated the Electric Chair, the bodies of prisoners violently lunged forward,

arched up, and/or slammed back into the chair. Their hands clenched into fists, sometimes leaving behind a grotesquely distended finger. Their chests heaved and their legs jerked. Defendants' electrocution protocol recognizes the possibility of such occurrences by instructing Extraction Team members to secure tightly the straps and harness that bind the prisoner to the Electric Chair.

200. Witnesses to electrocution executions report hearing a prisoner briefly scream when the executioner first activated the Electric Chair.

201. Witnesses to electrocution executions report: (a) seeing the prisoner's skin burning and/or split open at the site of a leg electrode; (b) seeing steam, smoke, sparks, electrical arcs, and/or flames coming out from under the hood covering the prisoner's face; (c) seeing steam, smoke, sparks, electrical arches, and/or flames surrounding the prisoner's head; (d) seeing steam, smoke, sparks, electrical arches, and/or flames emanating from the site of a leg electrode; (e) hearing a sizzling sound; and (f) smelling burning flesh.²

202. Witnesses to electrocutions report that visible portions of the prisoner's body changed colors during the electrocution. Witnesses report seeing visible portions of a prisoner's body become white, yellow, green, pink, red, scarlet, blue, purple, gray, and/or black.

²Defendants' electrocution protocol recognizes the possibility of such occurrences by posting a fire extinguisher near the Electric Chair during an electrocution execution and instructing the executioner that before he activates the electric chair, he activate and leave on an exhaust fan located above the Electric Chair.

203. Witnesses to electrocutions report seeing: (a) blood, saliva, sweat, and other fluids come out from under the hood covering the prisoner's face; and (b) blood come out of other parts of the prisoner's body.

204. At the conclusion of an electrocution protocol, witnesses report: (a) seeing the prisoner breathing, gasping for air, nodding his head, shuddering and/or otherwise moving; (b) hearing the prisoner gasp, moan, and/or groan; (c) seeing medical doctors ascertain that the prisoner remained alive; and (d) seeing the prisoner subjected to the electrocution protocol a second and third time before a doctor declared the prisoner dead.³

10. Results of Post-Mortem Examinations

205. Post-mortem examinations of electrocuted prisoners report severe burns to the prisoners' scalps. These burns form "hatband" rings on the prisoners' scalps and can be so severe that the skin at the burn site sloughs off a prisoner's head.

206. Post-mortem examinations of electrocuted prisoners report burns to the sides of the prisoners' heads, as well as to their faces, necks, torsos, backs, knees, groins, inner thighs, and scrotums.

207. Post-mortem examinations of electrocuted prisoners report minimal

³ Defendants' electrocution protocol recognizes the possibility that a prisoner will survive their electrocution process by providing that "if the inmate is not deceased after the initial electrical cycle ... the Warden gives the command to repeat the electrocution procedure."

abnormalities of their brains, consisting mostly of discoloration of the dura underneath the site of electrical burns to the prisoners' scalps.

208. Post-mortem examinations of electrocuted prisoners report severe burns to the prisoners' legs that were attached to the leg electrodes. These burns can be so severe that the skin at the burn site sloughs off a prisoner's leg.

209. The above post-mortem findings establish that when the electrical currents contacted the prisoners' heads, the currents followed paths of least resistance to the leg electrodes. The vast majority of the current moved tangentially along the prisoner's scalps, away from the head electrodes, went around the prisoners' heads, and ran down their necks, torsos, backs, and legs.

210. Post-mortem examinations of electrocuted prisoners report burst blood vessels in, among other areas of the prisoners' bodies, the prisoners' eyes, ears, nose, and anus, as well as blood and/or bloody froth in the prisoners' lungs.

211. Post-mortem examinations of electrocuted prisoners report feces and urine in the underclothing taken off the prisoners.

212. Defendants' Electric Chair recognizes the possibility that during an electrocution a prisoner will lose control of his bodily functions by providing a drip pan underneath a perforated seat.

213. A post-mortem examination of an electrocuted prisoner reports the prisoner's rectum burst and his bowels came out.

214. Post-mortem examinations of electrocuted prisoners report bruises to those areas of the prisoners' bodies where the straps and harnesses to the electric chairs secured the prisoners to those chairs.

215. Post-mortem examinations of prisoners report a blue or purple coloration of the prisoners' skins known as cyanosis. Cyanosis occurs when a person dies from asphyxia and respiratory arrest.

11. The Rejection of Electrocution as Humane Method of Execution

216. No state currently mandates electrocution as the primary method of carrying out judicial executions.

- a. In 1974, electrocution was the sole method of execution in Alabama, Arkansas, Connecticut, Florida, Georgia, Illinois, Indiana, Kentucky, Louisiana, Nebraska, New Jersey, New York, Ohio, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, and Virginia.
- b. In 1977, Texas abandoned electrocution. Tex. Crim. Proc. Code Ann. § 43.14.
- c. In 1982, New Jersey abandoned electrocution. N.J. Stat. Ann. § 2C:49-2.
- d. In 1983, Illinois abandoned electrocution. 725 Ill. Comp. Stat. 5/115-5.
- e. In 1983, Arkansas abandoned electrocution as an imposed method of execution. Arkansas gave prisoners sentenced to death before July 4, 1983, the ability to avoid electrocution by choosing instead lethal injection or lethal gas. Arkansas abandoned electrocution as an

execution method for prisoners sentenced to death after that date. Ark. Code Ann. § 5-4-617.

- f. In 1984, South Dakota abandoned electrocution. S.D. Codified Laws § 23-A-27A-32.
- g. In 1990, Louisiana abandoned electrocution. La. Rev. State. Ann. § 15:569.
- h. In 1993, Ohio abandoned electrocution as an imposed method of execution. Ohio gave prisoners the ability to avoid electrocution by choosing instead lethal injection. Ohio Rev. Code Ann. § 2949.22.
- i. In 1994, New York abandoned electrocution. N.Y. Correct. Law § 658.
- j. In 1994, Connecticut abandoned electrocution. Conn. Gen. Stat. § 54-100.
- k. In 1994, Virginia abandoned electrocution as an imposed method of execution. Virginia gave prisoners the ability to avoid electrocution by choosing instead lethal injection. Va. Code Ann. §§ 53.1-233, 53.1-234.⁴
- l. In 1995, Indiana abandoned electrocution. Ind. Code Ann. § 35-38-6-1.
- m. In 1995, South Carolina abandoned electrocution as an imposed method of execution. South Carolina gave prisoners the ability to avoid

⁴“Electrocution is a violent, torturous and dehumanizing act. Carrying out executions should not require the state to stoop to the same level as the criminal. The objective is death, not violent torture.” (Statement of Senator Edgar Robb). “[Electrocution is] a violent, torturous and, yes, dehumanizing way of carrying out the mandate of the people.” (Statement of Delegate Phillip Hamilton).

electrocution by choosing instead lethal injection. S.C. Code Ann. § 24-3-530.⁵

- n. In 1998, Kentucky abandoned electrocution as an imposed method of execution. Kentucky gave prisoners sentenced to death on or before March 31, 1998, the ability to avoid electrocution by choosing instead lethal injection. Kentucky abandoned electrocution as an execution method for prisoners sentenced to death after that date. Ky. Rev. Stat. Ann. § 431.220.
- o. In 1998, Pennsylvania abandoned electrocution. Pa. Stat. Ann. Tit. 61, § 3004.
- p. In 1998, Tennessee abandoned electrocution as an imposed method of execution. Tennessee gave prisoners sentenced to death before January 1, 1999, the ability to avoid electrocution by choosing instead lethal injection, with the default execution method being electrocution if the prisoner refused to select an execution method. Tennessee abandoned electrocution as an execution method for prisoners sentenced to death after that date. In 2000, Tennessee abandoned electrocution as the default execution method for prisoner sentenced to death before January 1, 1999. Tenn. Code Ann. § 40-23-114(a).⁶

⁵ “The technology that was available for us at the turn of the century in South Carolina was electricity. . . . It’s kind of cruel and inhumane.” (Statement of Representative Harry Hallman).

⁶ “We have reason to be very suspect of the technology of our Electric Chair, the maintenance of our Electric Chair, modifications that have been performed to the Electric

- q. In 2000, Florida abandoned electrocution as an imposed method of execution. Florida gave prisoners the ability to avoid electrocution by choosing instead lethal injection. Fla. Stat. Ann. §§ 922.10 and 922.105.
- r. In 2000, Georgia abandoned electrocution as a method for executing future death sentences, but left electrocution in place as the method for prisoners sentenced to death before the new legislation took effect. Ga. Code Ann. § 17-10-38.
- s. In 2001, the Georgia Supreme Court declared electrocution a cruel and unusual punishment:

[D]eath by electrocution involves more than the “mere extinguishment of life,” and inflicts purposeless physical violence and needless mutilation that makes no measurable contribution to accepted goals of punishment. Accordingly, we hold that death by electrocution, with its specter of excruciating pain and its certainty of cooked brains and blistered bodies, violates the prohibition against cruel and unusual punishment.

Dawson v. State, 554 S.E.2d 137, 143-44 (Ga. 2001) (citations omitted).

- t. In 2001 Ohio abandoned electrocution.⁷

Chair, as to whether or not this is actually gonna result in a death that would be quite heinous and cruel. . . .” (Statement of Representative Frank Buck).

⁷ “Electrocution is no longer a humane way of putting condemned prisoners to death. . . .” (Representative Jim Trakas).

- u. In 2002 Alabama abandoned electrocution as an imposed method of execution. Alabama gave prisoners the ability to avoid electrocution by choosing instead lethal injection. Ala. Code § 15-18-82.⁸
- v. In 2008 the Nebraska Supreme Court declared electrocution a cruel and unusual punishment:

Besides presenting a substantial risk of unnecessary pain . . . electrocution is unnecessarily cruel in its purposeless infliction of physical violence and mutilation of the prisoner's body. Electrocution's proven history of burning and charring bodies is inconsistent with both the concepts of evolving standards of decency and the dignity of man. Other states have recognized that early assumptions about an instantaneous and painless death were simply incorrect and that there are more humane methods of carrying out the death penalty. Examined under modern scientific knowledge, "[electrocution] has proven itself to be a dinosaur more befitting of the laboratory of Baron Frankenstein than the death chamber" of state prisons.

State v. Mata, 745 N.W.2d 229, 278 (Neb. 2008) (citation omitted).

217. No state that adopted the death penalty after 1974 authorized electrocution as a method of execution. Arizona, Az. Const. Art. 22 § 22; California, Cal. Penal § 3604; Colorado, Colo. Rev. Stat. § 18-1.3-1202; Delaware, Del. Code Ann. Tit. 11 § 4209; Idaho, Idaho Code § 19-2716; Kansas, Kan. Stat. Ann. § 22-4001; Maryland, Md. Code Ann. § 3-905; Mississippi, Miss. Code Ann. Correctional Services § 99-19-51; Missouri, Mo. Ann. Stat. § 546.720; Montana, Mont. Code Ann. § 46-19-103; Nevada, Nev. Rev. Stat. 176.355; New Hampshire, N.H. Stat. Ann. § 630:5; New Mexico, N.M. Stat. Ann. § 31-14-11; North Carolina, N.C. Gen. Stat. § 15-188; Oklahoma, Okla. St. Tit. 22 § 1014; Oregon, Or. Rev.

⁸"[Electrocution is a] horrible way for us to put a person to death." (Statement of Representative Thomas Jackson).

Stat. § 137.473; Utah, Utah Code Ann. § 77-18-5.5; Washington, Wash. Rev. Code Ann. § 10.95.180; Wyoming, Wyo. Stat. Ann. § 7-13-904.

218. The federal government does not authorize electrocution as a method for carrying out a federal death sentence.

219. No government in the world imposes electrocution as a method for executing a death sentence.

E. Alternatives to Tennessee's Lethal Injection and Electrocution Protocols

220. Mr. Middlebrooks identifies two alternative methods of execution: (1) nitrogen hypoxia, or (2) single-drug lethal injection using pentobarbital.

221. Both alternatives are feasible, readily implemented, and would significantly reduce the substantial risk of severe pain presented by the three-drug Lethal Injection Protocol.

222. Both alternatives are feasible, readily implemented, and would significantly reduce the substantial risk of severe pain presented by electrocution.

1. Primary Method: Nitrogen Hypoxia

223. Defendants are able to carry out Mr. Middlebrooks' execution by nitrogen hypoxia.

224. Nitrogen gas is widely available.

225. Nitrogen gas is inexpensive.

226. Inhalation of nitrogen gas deprives the body of oxygen resulting in hypoxia.

227. The inhalation of nitrogen gas will cause Mr. Middlebrooks to lose consciousness without causing pain.

228. Execution by nitrogen hypoxia is feasible, readily implemented, and significantly reduces the substantial risk of severe pain presented by Tennessee's current three-drug lethal injection protocol.

2. Alternative Method: Single Dose Pentobarbital Lethal Injection Protocol

229. A single dose of five grams of pentobarbital—properly compounded, stored, and administered— is feasible, readily implemented, and significantly reduces the substantial risk of severe pain presented by Tennessee's current three-drug lethal injection protocol.

230. Although the risks inherent with lethal injection for Mr. Middlebrooks apply equally with this alternative, the elimination of the paralytic and potassium will greatly reduce the substantial risk of severe pain present for Mr. Middlebrooks with the current three-drug protocol.

a. Pentobarbital is Feasible and Readily Implemented.

231. A single, five-gram dose of pentobarbital was Tennessee's lethal injection protocol from 2013 to July 5, 2018.

232. The Tennessee Supreme Court found that lethal injection with five grams of pentobarbital does not violate the Eighth Amendment or Article I, section 16 of the Tennessee Constitution. *West v. Schofield*, 519 S.W.3d 550, 568 (Tenn. 2017).

233. Pentobarbital is available for purchase by Defendants both domestically and internationally.

234. According to United States Attorney General William Barr, pentobarbital is “widely available.” Katie Benner, *U.S. to Resume Capital Punishment for Federal Inmates on Death Row*, N.Y. TIMES, July 25, 2019.

235. The federal government represented in October 2019 that it possesses pentobarbital for use in executions in pending litigation in the District Court for the United States for the District of Columbia:

As for the supply of pentobarbital, which is a controlled substance, [Bureau of Prisons (“BOP”)] selected a domestic bulk manufacturer that is properly registered with the Drug Enforcement Administration (“DEA”). The active pharmaceutical ingredient (“API”) produced by the manufacturer was subject to quality assurance testing. BOP further selected a compounding pharmacy to store the API and to convert it into injectable form as needed. Compounding pharmacies are those in which a licensed pharmacist or physician combines, mixes, or alters ingredients of a drug to create a medication tailored to the needs of an individual. AR 857; *see also* U.S. Food & Drug Administration, *Human Drug Compounding*, <https://www.fda.gov/drugs/guidance-compliance-regulatory-information/human-drug-compounding>. The compounding pharmacy is registered with the DEA and has performed its own testing of the injectable form of pentobarbital it produced. Further, two independent laboratories have performed quality testing of the injectable solution produced by the compounding pharmacy. Finally, BOP confirmed with the DEA that the BOP facility in Terre Haute, Indiana—where Lee’s execution will take place—meets the regulatory requirements for storage and handling of pentobarbital.

In Re: Federal Bureau of Prisons’ Execution Protocol Cases, D.C.C Case No. 1:19-mc-00145 (TSC), D.E. 16 at 23-24 (10/18/2019 Def. Mem. in Opp. to Mot. for Preliminary Injunction) (record citations omitted).

236. The federal government has procured the API for pentobarbital from a domestic bulk manufacturer.

237. The active pharmaceutical ingredients (API) of pentobarbital are available for sale in the United States and Tennessee for use in executions. *See id.*

238. Five states—Georgia, Idaho, Missouri, South Dakota, and Texas—use a single-drug pentobarbital protocol as the method of execution.

239. States have executed inmates with pentobarbital as recently as December 11, 2019.

240. Since 2012, three of those states—Missouri, South Dakota, and Texas—have conducted a total of 109 executions using this protocol.

241. Pentobarbital was used in nine state executions in 2017, 16 executions in 2018, and 14 executions so far in 2019.

242. In addition to being available from domestic suppliers, states can also import both the API and finished pentobarbital product from foreign sources.

243. A November 27, 2017 memorandum for the Attorney General reflects that in 2017 the BOP developed a plan to import powdered pentobarbital from a foreign FDA-registered facility and then use a compounding pharmacy to modify the drug into an injectable solution. In so doing, the BOP consulted with the FDA, which indicated that the importation of the pentobarbital would be subject to Food and Drug Administration (FDA) enforcement discretion and “that the shipment should be allowed into the country.”

244. On May 3, 2018, the Office of Legal Counsel (OLC), which provides legal advice to the President and executive branch agencies, issued an opinion stating that the FDA lacks jurisdiction to regulate drugs and devices intended for use in executions. The opinion, which is binding on the FDA, means that the agency has no legal basis to block the importation of pentobarbital from foreign sources for use in executions, thus removing a significant obstacle to importation that previously existed. Ex. 1, OLC Opinion.

245. Pentobarbital from foreign sources is available for import to states that comply with the appropriate process for obtaining that drug, just as it has been to the federal government.

246. As of August 31, 2017, Defendants were aware of ten suppliers who were willing to sell pentobarbital to TDOC. The TDOC staff member responsible for procuring lethal injection chemicals wrote on a note, later provided in response to a TPRA request by Plaintiffs' counsel: "Plenty in Europe & available according [redacted source information] has it. no lawyers." [sic]. *Id.*

247. Defendants chose not to purchase from any of those suppliers.

248. Defendants have not attempted to locate any foreign vendor of pentobarbital for importation.

249. Tennessee has not applied for an importation license.

250. Arizona, and Nebraska have obtained importation licenses for the importation of foreign pentobarbital. Ohio's application for a license to import is pending.

251. If this Court finds Tennessee’s current lethal injection protocol unconstitutional, state law allows for execution “by any constitutional method,” Tenn. Code Ann. § 40-23-114(d), which would include a reversion to the state’s prior pentobarbital method.

b. A Properly Administered Five Gram Pentobarbital Protocol Will Significantly Reduce the Substantial Risk of Severe Pain and Needless Suffering Presented by Tennessee’s Current Three-Drug Lethal Injection Protocol.

252. Mr. Middlebrooks’s proposed “Pentobarbital Protocol” consists of the intravenous injection of five grams of pentobarbital—properly compounded, stored, and administered—which does not present a substantial risk of serious pain or needless suffering.

253. Pentobarbital is a barbiturate that acts as a sedative hypnotic drug.

254. A barbiturate like pentobarbital (and sodium thiopental, the first drug in an earlier version of Tennessee’s three-drug protocol) reliably induces and maintains a coma-like state that renders a person insensate to pain. When properly administered, barbiturates eliminate the risk that a prisoner will feel the administration of other lethal drugs.

255. Barbiturates do not have a ceiling effect.

256. Midazolam facilitates the binding of gamma-amino-butyric acid (GABA) to GABA receptors in the brain. GABA is a naturally occurring inhibitory neurotransmitter. GABA inhibits the flow of electrical impulses through the neurons to which it binds. The effect of GABA is useful to healthy brain functioning,

for example preventing seizures. But at an extreme, when enough neurons are inhibited by GABA, a person becomes sedated – feeling sleepy and lethargic.

257. Barbiturates, including pentobarbital and sodium thiopental, also facilitate the activity of GABA to inhibit neurons. But barbiturates have an additional, direct effect on GABA receptors that midazolam does not have. Barbiturates bind directly to receptors, mimicking the action of GABA. Thus, even if all the GABA has been bound, barbiturates will bind to additional GABA receptors and inhibit more and more neurons from firing. A large amount of barbiturates will silence brain activity and create a coma.

258. Unlike barbiturates, midazolam does not mimic GABA, bind to receptors, and stop neurons from firing electrical impulses on its own; midazolam needs GABA to affect brain activity. Thus, midazolam's effect is capped by the limited amount of GABA in the brain. Once all GABA has been bound, increasing the dose of midazolam does not further suppress brain activity. This is midazolam's “ceiling effect,” a fundamental and unavoidable pharmacological property shared by all benzodiazepines, which clinical studies in humans have demonstrated.

259. In other words, although people normally assume that giving twice as much of the drug will cause twice the effect, that's not the case with midazolam or other benzodiazepines. Instead, unlike barbiturates, midazolam's effect is capped ultimately by the body's own production of GABA. Because barbiturates can mimic GABA and bind to GABA receptors, barbiturates have no comparable ceiling effect.

Given midazolam's ceiling effect, midazolam cannot provide the deep, coma-like, anesthetized state necessary to avoid responsiveness to pain.

260. Midazolam is not approved or used as a stand-alone anesthetic during painful surgeries, because it is inherently incapable of inducing and maintaining deep, coma-like unconsciousness.

261. The BOP's medical expert, while ethically constrained from advising whether midazolam or pentobarbital would produce a more humane death, answered questions under oath admitting that pentobarbital is able to achieve a "deeper level" of unconsciousness than midazolam.

262. A Pentobarbital Protocol will repress the brain's respiratory impulses, causing the body to become oxygen deficient and resulting in the cessation of cardiac activity.

263. A Pentobarbital Protocol functions as both a method of death and as an anesthetic, rendering the prisoner unaware and insensate to any pain before death occurs.

264. A Pentobarbital Protocol will result in a quick and complete loss of consciousness.

265. In contrast, the current three-drug protocol causes terror, severe pain, and needless suffering because (a) midazolam has no pain-relieving properties, (b) midazolam will not protect Mr. Middlebrooks from awareness or sensation of the paralytic and potassium; (c) vecuronium bromide causes paralysis and suffocation;

and (d) potassium chloride causes severe pain upon intravenous injection and at the time of cardiac arrest.

266. Defendant Parker has stated under oath that he would prefer to execute inmates with pentobarbital.

267. Defendants have previously relied upon an expert, Dr. Li, who testified that “there is a negligible risk that a condemned inmate to whom five grams of pentobarbital is properly administered . . . will experience any pain and suffering associated with the execution process.” *West v. Schofield*, 519 S.W.3d 550, 560 (Tenn. 2017).

268. Dr. Li’s written report, which Defendants introduced into evidence in previous state proceedings, includes the following:

4. In the execution context, the dose and rate of administration [of the pentobarbital] will have a rapid and profound effect on consciousness, respiratory and circulatory functions. The inmate will quickly lose consciousness and become comatose. Respiration and circulation will be depressed resulting in death. Unconsciousness is a state when the ability to maintain an awareness of self and the environment is lost. In this state, the inmate completely lo[ses] responsiveness to people and other environmental stimuli.

5. It is my opinion, to a reasonable degree of medical certainty, in the execution context, that the intravenous administration of 5 grams of pentobarbital will render the inmate unconscious within seconds and, for an average human being will result in death within minutes and that the Protocol's contingency provision for the administration of an additional 5 grams of pentobarbital will certainly result in death.

6. It is my opinion, to a reasonable degree of medical certainty, that there is a negligible risk that a condemned inmate to whom 5 grams of pentobarbital is properly administered pursuant to the Protocol will experience any pain and suffering associated with the execution process.

Id. at 560-61 (alterations in original).

269. Intravenous injection of five grams of pentobarbital, properly compounded and properly administered, would constitute a significant reduction of the substantial risk of severe pain, needless suffering, and terror that is present in the Lethal Injection Protocol.

VI. CAUSES OF ACTION

Count 1: Tennessee's lethal injection protocol constitutes cruel and unusual punishment in violation of the Eighth and Fourteenth Amendments to the United States Constitution.

270. Tennessee's Lethal Injection Protocol violates the Eighth and Fourteenth Amendments to the United States Constitution.

271. The Eighth Amendment prohibits cruel and unusual punishment, for example, executions which "involve the unnecessary and wanton infliction of pain," *Gregg v. Georgia*, 428 U.S. 153, 173 (1976), or which "involve torture or a lingering death." *In re Kemmler*, 136 U.S. 436, 447 (1890) (citing *Wilkerson v. Utah*, 99 U.S. 130, 135 (1878)); accord *Gregg*, 428 U.S. at 170.

272. Subjecting individuals to a future risk of harm, such as the improper administration of lethal injection chemicals, can qualify as cruel and unusual punishment. *Baze v. Rees*, 553 U.S. 35, 49 (2008). To prevail on an Eighth Amendment claim there must be a "substantial risk of serious harm," or an "objectively intolerable risk of harm." *Id.* at 50.

273. Whether any method of execution involves a constitutionally impermissible risk of pain necessarily involves comparing that protocol with whatever alternative the Plaintiff proffers. *Bucklew v. Precythe*, 139 S. Ct. 112,

1126 (2019). If a challenged protocol involves a comparatively substantially greater risk of severe pain or suffering, a plaintiff has shown that the protocol violates the Eighth Amendment. *Id.*

274. The Protocol presents a risk that is sure or very likely to cause serious illness and needless suffering, and Plaintiff “has identified a feasible and readily implemented alternative methods of execution”—nitrogen gas or 5 mg of pentobarbital—which “the State refuse[s] to adopt without a legitimate reason, even though it would significantly reduce a substantial risk of severe pain.” *Bucklew*, 139 S. Ct. at 1129.

275. As the Supreme Court clarified in *Bucklew*, the assessment of the risk of pain is necessarily a comparative analysis; a lethal injection protocol violates the Eighth Amendment if it involves a comparatively substantially greater risk of pain and suffering than a readily available alternative. *Bucklew*, 139 S. Ct. at 1126.

276. Plaintiff does not allege that the Constitution prohibits a risk of *any* amount of pain during execution, but instead that this Protocol gives rise to sufficiently imminent dangers that he will experience severe pain and unnecessary suffering due to pulmonary edema resulting from the dose of 500 mg midazolam, from suffocation and terror of paralysis from the vecuronium bromide, and from the searing pain of the potassium chloride.

Count 2: Execution by electrocution creates a substantial risk of unnecessary pain in violation of the Eighth and Fourteenth Amendments of the United States Constitution.

277. The Execution Protocol presents a risk that is sure or very likely to cause serious illness and needless suffering, and Plaintiff “has identified a feasible and readily implemented alternative methods of execution”—nitrogen gas or 5 mg of pentobarbital—which “the State refuse[s] to adopt without a legitimate reason, even though it would significantly reduce a substantial risk of severe pain.” *Bucklew*, 139 S. Ct. at 1129.

Count 3: Execution by electrocution violates the dignity of man standard of the Eighth and Fourteenth Amendments of the United States Constitution.

278. The Supreme Court has “ma[de] clear that public perceptions of standards of decency with respect to criminal sanctions are not conclusive. A penalty also must accord with “the dignity of man,” which is the “basic concept underlying the Eighth Amendment.” *Gregg v. Georgia*, 428 U.S. 153, 173 (1976) (quoting *Trop v. Dulles*, 356 U.S. 86, 100 (1958) (plurality opinion)). Barbaric punishments such as beheading and drawing and quartering, that inflict unnecessary physical violence, violate the Eighth Amendment. *Wilkinson v. Utah*, 99 U.S. 130 (1878). “[B]asic notions of human dignity command that the State minimize ‘mutilation’ and ‘distortion’ of the condemned prisoner’s body.” *Glass v. Louisiana*, 471 U.S. 1080, 1085 (1985) (Brennan, J., dissenting). “In evaluating the constitutionality of a challenged method of capital punishment, courts must determine whether the factors discussed above—unnecessary pain, violence, and

mutilation-are “*inherent* in the method of punishment.” *Id.* (quoting *Louisiana ex rel. Francis v. Resweber*, 329 U.S. 459, 464 (1947) (emphasis in original)).

279. As the Georgia Supreme Court held: “[D]eath by electrocution involves more than the ‘mere extinguishment of life,’ and inflicts purposeless physical violence and needless mutilation that makes no measurable contribution to accepted goals of punishment.” *Dawson v. State*, 554 S.E.2d 137, 143 (Ga. 2001) (quoting *In re Kemmler*, 136 U.S. 436, 447 (1890)). Electrocution violates the Eighth Amendment’s dignity of man standard as it burns, mutilates, distorts, and otherwise disfigures a prisoner’s body. *State v. Mata*, 745 N.W.2d 229, 264–65 (Neb. 2008) (so holding).

Count 4: Execution by electrocution violates evolving standards of decency in violation of the Eighth and Fourteenth Amendments of the United States Constitution.

280. Under the Eighth Amendment, a state’s intended method of execution must comport with evolving standards of decency. *State v. Mata*, 745 N.W.2d 229, 263 (Neb. 2008) (“We conclude that evolving standards of decency must apply to claims that the State’s intended method of execution inflicts unnecessary and wanton pain.”). In concluding that electrocution violated the Eighth Amendment, the Nebraska Supreme found the following facts as to the overwhelming shift away from electrocution:

Regarding evolving standards, the evidence showed that by 1949, 26 states had changed their execution method from hanging to electrocution, but that no state had adopted electrocution since. Instead, states began adopting lethal gas as their execution method. By 1973, 12 states were using lethal gas and 20 states were using electrocution. Then, in 1977, lethal injection was introduced.

By 1999, of the 38 states that permitted capital punishment, 34 states offered lethal injection as either a choice or the exclusive method of execution and only four states authorized electrocution as their exclusive method of execution. In 2000, Georgia switched from electrocution to lethal injection as its sole method of execution for capital offenses committed on or after May 1, 2000. Florida also switched in 2000 from electrocution to lethal injection unless the person sentenced to death affirmatively elects electrocution. Finally, in 2002, Alabama followed Florida's lead. Thus, as of July 1, 2002, Nebraska is the only state in the nation to require electrocution as its sole method of execution. . . . Faced with changing societal values, we cannot ignore Nebraska's status as the last state to retain electrocution as its sole method of execution.

Mata, 745 N.W.2d at 263–64. This data and the facts asserted above about the movement away from electrocution shows that electrocution does not comport with evolving standards of decency and, therefore, violates the Eighth Amendment.

VII. PRAYER FOR RELIEF

Mr. Middlebrooks respectfully requests that this Court declare Tennessee's Lethal Injection and Electrocution protocols unconstitutional and enjoin Defendants from killing him using these protocols. He further requests any other just and appropriate relief under the circumstances.

Respectfully Submitted,

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